Oracle DAC 1000 D/A Converter + Pre-amplifier



ORACLE AUDIO TECHNOLOGIES

OWNER'S MANUAL

INTRODUCTION

Thank you for purchasing the Oracle DAC 1000 D/A converter + pre-amplifier. Please read carefully the instructions before using your DAC 1000. This unit is manufactured under strict quality control and must be used properly for safety and optimal performance.

Oracle DAC 1000 is a state-of-the-art Dac D/A Converter + Pre-amplifier, which supports;

- 1) High-end 2 Channel Analog Preamplifier
- 2) Up to 192kHz, 24Bit Upsampling Digital to Analog Converter
- 3) Upsampled Recording Digital Output

The Oracle DAC 1000 is designed to support various digital and analog sources like 6 Digital inputs and 2 Analog inputs.

The exceptional technology combination between the pre-amplifier and the D/A converter sends the appropriate signals to the rest of your audio system leading you to experience enlightening musical emotions. Oracle's Audio reputation and prestige still demonstrates its ability to defend the leading edge position with the new Oracle Dac 1000. We couldn't imagine any better way to achieve build in quality assurance.

Oracle Audio The Fine Art Of Playing Music...!

CAUTION!

Oracle DAC 1000 voltage is preset according to the country used.

If you move after purchasing the DAC 1000, please contact Oracle Audio Technologies to modify your voltage wiring for proper use.

To reduce the risk of fire or electrical shock, do not put the DAC 1000 in water, humidity or near a heat source. Do not remove the top cover , since they are not serviceable parts.

Oracle Audio will not under any circumstances be liable for any incidental arising from improper use of the Dac 1000.

* When purchasing your Oracle Audio DAC 1000;

** The switches on the rear panel indicated "output and record" are preset in variable / bypass position.

*** It is prohibited to connect the DAC 1000 and the power amplifier in "fixed mode".

**** The connection should be at the "variable mode" position.

UNPACKING:

Open the box and carefully remove the protective foam from your unit.

Remove the plastic bag.

Included:

- Oracle Dac 1000 D/A converter + pre-amplifier
- Power cord
- Remote control
- Owner's manual

FEATURE

1. High-End Preamplifier

The DAC 1000 is specially designed to guarantee the full fidelity of high-end sound reproduction for almost a life time usage. High quality Digital volume control and dual monaural design provide excellent separation with pin-point imaging. Should you want to use DAC 1000 as a pure D to A Converter with a fixed output, a switch on the rear panel makes this change possible by selecting 'fixed' mode instead of normal 'variable' mode.

- Analog Input
 - 1 XLR Balanced Input 1 RCA Unbalanced Input
 - Analog Output (Main Out)
 1 XLR Balanced Output
 1 RCA Unbalanced Output
 - Full Class A Output Stage
 - High Quality Digital Volume Control
 - Separate Transformers for the Digital and Analog stages

2. Selectable, Upsampling Digital to Analog Converter

Oracle DAC 1000 is a dedicated stand-alone D/A Converter. The DAC section has an upsampling function up to 192kHz (24Bit) which is selectable by the user.

- Digital Input
 - 2 AES/EBU (Balanced)
 - 2 Coaxial (RCA)
 - 2 Optical (Toslink)

• 24 Bit /192 kHz, Delta-Sigma DAC

Custom designed digital filter

Specially designed digital filtering circuitry is used in DAC 1000 to enhance the quality of sound by providing a cleaner signal with an excellent signal to noise ratio.

PLL Circuit

For a jitter-free signal, special PLL circuit is applied in the Digital section.

3. Upsampled (24Bit/96kHz) Digital Recording Output

The DAC 1000 is equipped with 4 digital outputs for direct digital recording. You can easily make high quality recordings of your favorite digital sources by connecting the cable between DAC 1000 and your digital recorder.

Digital Output

- 1 Balanced AES/EBU
- 2 Coaxial
- 1 Optical Toslink

4. Surround (Input for surround processor)

DAC1000 provides a 'Surround' input for a simple connection to your surround processor.

INPUT / OUTPUT PORTS

1. Connection of DAC 1000 D/A converter + pre-amplifier

On the rear of DAC 1000, there are 2 Analog Outputs (1 Balanced, 1 Unbalanced), 2 Analog Inputs (1 Balanced, 1 Unbalanced), 6 Digital Inputs and 4 Digital Outputs and the analog 'Surround' input. Also included is a 12V trigger output.

(fig 1 The Rear Panel)



Note: Be sure to turn the power off when you change mode switches " Output " and " record".

1) Analog Input

BALANCED

XLR Balanced input is used for the finest quality sound. Connect your equipment which has a XLR/Balanced Output by a Balanced Interconnect.

UNBALANCED

RCA Unbalanced input can be plugged into this input. Output from FM Tuner, Tape-Out, VCR-Out etc. can be connected into this input.

SURROUND

For home theater use only. Connect main out from your surround processor with this 'Surround' input. When in Surround mode, the volume control of the DAC 1000 is not valid. You should control the volume from the surround processor.

*The display window on the front panel shows "SURROUND MODE".

Another press of 'Surround' button will bring you back to normal DAC 1000 status.

2) Analog Output

XLR Balanced & RCA Unbalanced outputs are provided for the connection of power amplifiers. Both outputs can be used at the same time.

* We recommend XLR Balanced connection for better performance.

• FIXED/VARIABLE switch*

The DAC 1000 is designed primarily to be used as a DAC/Preamp in which case the switch should be in 'VARIABLE' mode (default mode).

But, for those who already own a high-end preamplifier, the DAC 1000 can be switched to a fixed-output Digital to Analog Converter. To use the DAC 1000 as a pure DAC Stage, change output mode switch on the rear panel to 'FIXED' mode.

*BE SURE TO TURN THE POWER OFF WHEN YOU CHANGE MODE SWITCH.

3) Digital Input

AES/EBU Balanced Digital is the best solution for Digital playback when connected to the transport with 110 ohm balanced digital cables.

Coax 1 & 2 are generally used ports for digital connection.

Optical Toslink is for optical connection. Use proper Toslink optical cable for this connection.

4) Digital Output

The DAC 1000 routes digital input signals to its 4 digital outputs. You can designate the specific input to be routed on 4 digital output ports by pressing 'RECORD' button either from the remote or from the front panel.

OPERATION

1. Front Panel Buttons and Display

(fig. 2 Front Buttons)





STANDBY

The main power switch is located on the back side.

Once the main power switch is on, the display shows "ORACLE AUDIO DAC 1000" and changes to a normal display mode as follows:

When FIXED/VARIABLE switch is in "VARIABLE":	REC_OFF	192 kHz
	D1_AES1	0.0

FIXED/VARIABLE switch is in "FIXED":	REC_OFF	192 kHz
	D1_AES1	FIXED

When you push the 'Standby' switch to turn DAC 1000 off, the display shows "Standby". A very small current is used when in "Standby" mode. We recommend leaving the main power switch 'on' under normal circumstances.

When you are away from home and the DAC 1000 is not in use for a long time, turn the main power 'off'. In normal use, use the "Standby" switch to activate and deactivate the system. If you have a 12V trigger cable connected to your power amplifier, a push of 'Standby' button will automatically turn on the power amplifier.

In "Standby" mode, the DAC 1000 memorizes the volume level of all inputs. A sudden 'Click' sound can surprise you, <u>so proper setting of the volume level control before going to 'standby' is always</u> <u>recommended.</u>

INPUT

The DAC 1000 has a total of 8 inputs (6 digital inputs and 2 analog inputs). The first default input is 'D1_AES1' and the volume level is displayed on the lower right side of the display. Output level starts from 00.0 to 59.5 with a 0.5 step to show a total of 120 steps. Pressing 'Input' continuously shows the selection as follows.

FIXED MODE

 $D1_AES \ EBU1 \rightarrow D2_AES \ EBU2 \rightarrow D3_COAX1 \rightarrow D4_COAX2 \rightarrow D5_TOS1 \rightarrow D6_TOS2 \rightarrow D1_AES \ EBU1...$

VARIABLE MODE

D1_AES EBU1 \rightarrow D2_AES EBU2 \rightarrow D3_COAX1 \rightarrow D4_COAX2 \rightarrow D5_TOS1 \rightarrow D6_TOS2 \rightarrow A1_BAL \rightarrow A2_UNBAL

SURROUND

To use this function, the DAC 1000 should be in "variable mode". For home theater use only.

• UPSAMPLING

Upsampling of the digital signal makes a very delicate sound change. DAC 1000 enables the user to choose one from 4 different sampling rates. They are Bypass, 48kHz, 96kHz, and 192kHz.

Bypass means sampling rate is just passed through as it is.

Therefore, no change of sampling rate is done when 'Bypass' mode is selected.

You should be the judge for the changes of the sound. Pressing 'UPSAMPLE' and experiment by yourself.

RECORD

Choose the input you want to record and upsampling (96kHz) Bypass/ Upsample selection on the rear panel.

The status for record is displayed on the upper left side of the display.

BYPASS MODE

 $\label{eq:rec_off} \texttt{Rec_off} \rightarrow \texttt{D1}_\texttt{Aes} ~\texttt{EBU1} \rightarrow \texttt{D2}_\texttt{Aes} ~\texttt{EBU2} \rightarrow \texttt{D3}_\texttt{COAX1} \rightarrow \texttt{D4}_\texttt{COAX2} \rightarrow \texttt{D5}_\texttt{TOS1} \rightarrow \texttt{D6}_\texttt{TOS2} \rightarrow \texttt{Rec}_\texttt{OFF}...$

UPSAMPLE MODE

 $\mathsf{REC_OFF} \rightarrow \mathsf{D1_AES} \ \mathsf{EBU1} \rightarrow \mathsf{D2_AES} \ \mathsf{EBU2} \rightarrow \mathsf{D3_COAX1} \rightarrow \mathsf{D4_COAX2} \rightarrow \mathsf{D5_TOS1} \rightarrow \mathsf{D6_TOS2} \rightarrow \mathsf{REC_OFF}...$

- The upper middle selection on the display identifes 96kHz digital output.
- Be sure to turn the power off when you change BYPASS / UPSAMPLE mode switch.

VOL UP / VOL DOWN

To control the volume, use the up and down buttons.

Volume varies from 00.0 up to 59.5, and MAX (120 Step)

When in "Standby" mode, all the volume level are memorized. And they are recovered when the unit is on again.

The main power-off from the rear panel will erase the level information from DAC 1000.

2. Remote Control

(fig. 2 Remote Control)

	REPEAT	
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2.1. REMOTE CONTROL HANDSET

The remote control handset of your Oracle Dac 1000 can control the Oracle CD 1000 or other cd player model, by using the code RC-5.

2.2 BATTERY INSTALLATION PROCEDURE

Remove the back cover on the remote control handset. Install two "AAA" batteries following the proper polarity. Test the remote control handset for proper operation. Install back cover.

NOTE:

It is strongly recommended to use Alkaline batteries for an extended cycle operation of the remote control handset but more importantly to prevent any chemical leakage.

(a) SPECIFICATION

Digital to Analog Converter Section

- . 24/192 Upsampling DAC
- . Selectable Upsampling (Bypass, 48, 96, 192kHz/24Bit)
- . 6 Digital Inputs: 2 AES/EBU, 2 Coax, 2 Toslink
- . 4 Digital Outputs: 1 AES/EBU, 2 Coax, 1 Toslink

Preamp Section

- . Analog Inputs: 1 XLR Balanced, 1 RCA Unbalanced
- . Full Digital Volume Control (Fixed, Variable Mode Selectable)
- . Analog Outputs: 1 XLR Balanced, 1 RCA Unbalanced
- . Analog Output: Fully Balanced, Class-A Operation
- . Bypass for Surround Processor Connection

Other Functions

- . Full Function Remote (Upsampling, Input, Volume, Mute, Surround)
- . Upsampled (96kHz/24Bit) Digital Recording Output, Selectable

Dimension (WHD)

480 X 100 X 400 mm

Weight:

12 kg

WARRANTY

Oracle Audio Technologies carries a 3 year warranty on new products. Always contact your authorized Oracle Audio dealer for service. The Oracle Dac 1000 must not have been modified in any circumstances or the warranty will be voided.

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